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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,352	05/15/2006	Peter Noest	01012-1034	6264
7590 06/28/2007 Phouphanomketh Ditthavong			EXAMINER	
DITTHAVONG & CARLSON			FUTEL, GAYLA S	
Suite A 10507 Braddoo	ek Road	٠.	ART UNIT	PAPER NUMBER
Fairfax, VA 22			2609	
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• . •	•		06/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/562,352	NOEST ET AL.				
Office Action Summary	Examiner	Art Unit				
	Gayla Futel	2609				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	,					
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	·					
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
ine oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1. ☑ Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application						
3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☑ Notice of Informal Patent Application Paper No(s)/Mail Date 12/27/2005, 6/23/2006. 6) ☑ Other:						

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### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshizawa et al. (US Patent No. 5,862,461).
- 3. Regarding claim 1, Yoshizawa et al. anticipates an attenuator system for adjusting the output power of an HF signal source, the attenuator system comprising:
  - -An electronic attenuator (Fig. 7, #77; Col. 10, lines 46-48)
  - -A mechanical changeover switch at an input-end of the electronic attenuator (Fig. 7, #72) and
  - -A mechanical changeover switch at an output-end of the electronic attenuator (Fig. 7, #73), wherein the electronic attenuator is arranged between the signal source and an output (Fig. 7, #2), and the mechanical changeover switches are configured from switching to a first switching position wherein the electronic attenuator is connected between the signal source and the output, and a second switching position (Col. 11, lines 11-13), wherein a direct bypass line is connected between the signal source and the output (Col. 11, lines 4-7).

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Yoshizawa et al. teaches that either a transmission path or an attenuator may replace the amplifiers shown along the signal lines in Fig. 5 and Fig. 7 in an effort to change the amount of gain (Col. 10, lines 44-49).

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4. Regarding claim 5, Yoshizawa et al. teaches the attenuator system of claim 1 as stated above. Yoshizawa et al. further anticipates the attenuator system wherein a switchgear for the mechanical changeover switches (Fig. 7, #76) is coupled to the output-power setting mechanism of the signal source (Col. 11, lines 41-43) wherein, above a predetermined output power (Col. 11, lines 44-45), the bypass lines is connected between the signal source and output (Col. 11, lines 57-59), and below the predetermined output power, the electronic attenuator is connected between the signal source and output (Col. 11, lines 60-63).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. (US Patent No. 5,862,461) in view of Loehner et al. (US Patent No. 5,347,239). Yoshizawa et al. teaches the attenuator system of claim 1 as stated above. Yoshizawa further teaches the direct bypass line is formed as a mechanical attenuator (Col. 10, lines 44-49). However, Yoshizawa et al. fails to teach that the mechanical attenuator is

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switched of via mechanical switches between a plurality of attenuation values. Barrett teaches an attenuation network (Fig. 8) that switches between different attenuation values. Barrett teaches that the single-pole double throw switches are mechanical switches (Col. 2, lines 48-49). It would have been obvious to one of ordinary skill in the art to use the step attenuator of Barrett with the system of Yoshizawa et al. because it would allow the system to vary the gain with less power consumption.

- 7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. (US Patent No. 5,862,461) in view of Gattz (US Patent No. 3,369,096). Yoshizawa et al. teaches the attenuator system of claim 1 as stated above. However, Yoshizawa et al. fails to teach the mechanical changeover switches are bi-stable coaxial relay changeover switches. Gattz teaches a coaxial changeover switch (Col. 1, line 11, 16-17). It would have been obvious to one of ordinary skill in the art to use a coaxial changeover switch as the mechanical changeover switch because the coaxial changeover switch of Gattz will have minimal wear of the mechanical parts, which allows the system to last longer.
- 8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. (US Patent No. 5,862,461) in view of Tomita et al. (US Patent No. 6,339,353). Yoshizawa et al. teaches the attenuator system of claim 1 as stated above. However, Yoshizawa et al. fails to teach that the mechanical changeover switches are transfer switches. Tomita et al. teaches a changeover switch that is comprised of transfer switches (Fig. 13, #94; Col. 12, lines 17-19). It would have been obvious to

one of ordinary skill in the art to use transfer switches in place of the changeover switches because it would allow for a higher power signal source.

## Claim Rejections - 35 USC § 112

- 9. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 states that the switchgear causes the mechanical changeover switch to disconnect the electronic attenuator from the output and the mechanical changeover switch connects the electronic attenuator to the signal source at the input end. It is unclear what the applicant is attempting to claim

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gayla Futel whose telephone number is 571-270-3008. The examiner can normally be reached on Mon-Thur 7:00 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GF

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